

A Corporate Publication of Santee Cooper

POWERSOURCE

FALL 2012



From the CEO



Santee Cooper takes seriously our long-standing commitment to environmental stewardship. We were the first utility in South Carolina to deliver Green Power to customers. We are pursuing an aggressive energy-efficiency program with a goal of annual energy savings by 2020 that would power close to 15,000 homes. We are doing all of this voluntarily and in a cost-effective manner that lets customers, also voluntarily, support new renewable generation.

It goes without saying that we comply with federal, state and local environmental regulations. We monitor and participate in discussions about the regulatory process, looking to represent our customers' best interests, and we upgrade equipment and practices ahead of mandates when it is the right thing to do.

We've been forthcoming about the costs of renewable energy, and again, our customers are voluntarily supporting Santee Cooper Green Power through monthly purchases. It's time customers also understand the mandated costs of environmental controls and regulations that they must pay.

Since the 1970s, Santee Cooper has invested \$1.3 billion for environmental costs. Cross Unit 4 is our newest base load generating unit. It cost us \$640 million to build, and \$218 million, or more than a third, went for environmental control equipment.

Looking to 2013, Santee Cooper has budgeted \$227 million to meet expected environmental costs, a figure that includes debt service for the major equipment purchases referenced at Cross 4 and other facilities.

These necessary environmental costs account for a full 11 percent of our customers' bills. Fuel to run the generating units is 51 percent of the bill. Everything else comes out of the remaining 38 percent.

We can debate another day the merits of new regulations enacted or under consideration, such as an expensive air-emissions rule that will require us to spend hundreds of millions of dollars for an almost-negligible improvement over what we're already controlling in emissions. Those expenses, unfortunately, will be in addition to what I've discussed above.

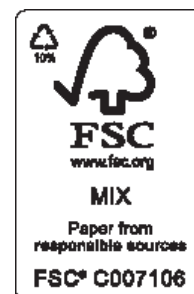
Customers deserve to know how their dollars are spent, and I'm pleased to add this function to our bills. Knowledge is power, after all. Santee Cooper continues to be frugal with costs we can control, and we will continue to inform customers about external pressures that we must pass on to them.

Lonnie N. Carter
President and
Chief Executive Officer



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email: mollie.gore@santeecooper.com

phone: 843-761-7093

Kevin F. Langston // Editor
Nicole A. Aiello // Writer
Mollie Gore // Writer
Willard Strong // Senior Writer

Jim Huff // Photo Editor/Photographer
Sarah Nell Blackwell // Designer
Tom Galmarini // Designer

Address all correspondence to:

Corporate Communications, Santee Cooper, 1 Riverwood Drive, Moncks Corner, SC 29461-2901

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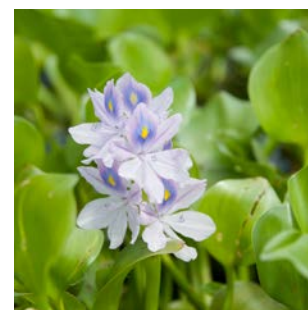
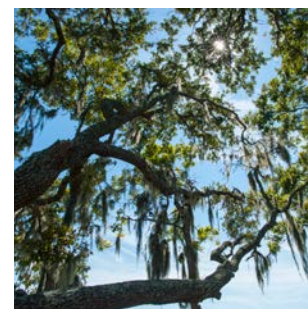


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4

SCUTE Digs Sea Turtles

By Nicole A. Aiello
Photography by Jim Huff and Julie Bostian



Environmental Accountability **10**
By Willard Strong

Photography by Jim Huff

A Trail Runs Through It **16**
By Kevin F. Langston

Photography by Jim Huff

Reduce The Use Lights the Way **24**
By Mollie Gore

Photography by Jim Huff

Weeding Out the Weeds **26**
By Mollie Gore

Photography by Jim Huff

Environmental Performance **32**

NewSource **34**

SCUTE Digs

Sea Turtles



By Nicole A. Aiello

Photography by Jim Huff
and Julie Bostian

They've been described as beautiful and graceful creatures, even mysterious and exotic. Indeed, they have an enigmatic presence about them. No matter how you picture them, though, most sea turtles can be described in one word — endangered.

Although it is disturbing to know a majority of sea turtles are endangered, it would be devastating if they were to become extinct. Along the South Carolina coast, there's an organization that's determined to prevent this from happening.

For more than two decades, volunteers of South Carolina United Turtle Enthusiasts, known more familiarly as SCUTE, have been combing South Carolina beaches every morning during the sea turtle nesting season searching for tracks and nests.

SCUTE, which was founded in 1989 by Chris Marlow and Jeff McClary, is permitted through the South Carolina Department of Natural Resources (SCDNR) to protect sea turtle nests from North Myrtle Beach down to the North Inlet in Georgetown.

“Chris was the one who got me passionate about sea turtles. He had the idea to start a program that monitors nests and then convinced me he needed my help,” McClary says. “Because of



his foresight and love of turtles, we were able to grow the organization from covering a few miles of beach to now covering basically the entire Grand Strand.”

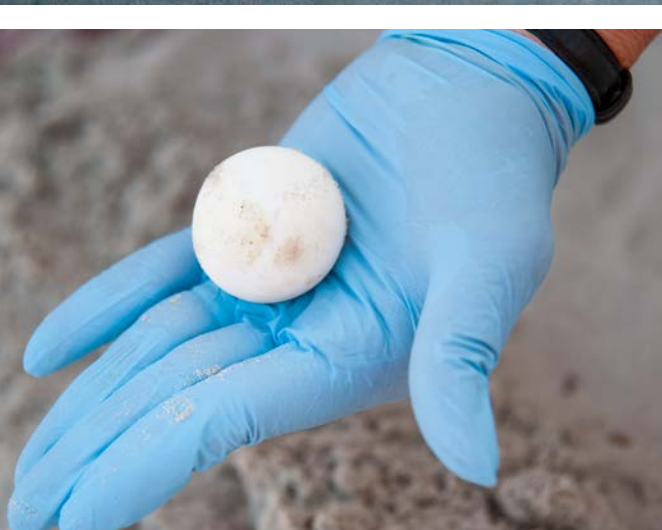
Below: Jeff McClary co-founded SCUTE with Chris Marlow more than 20 years ago and continues to be the driving force behind the organization.

SCUTE is permitted to identify nests and relocate them, inventory nests once they've hatched and record information on the comings and goings of sea turtles. Volunteers go through training to learn about sea turtle nesting habits and to learn SCDNR's guidelines before they begin scouring the sandy beaches.

During the nesting and hatching season, volunteers set their alarms to wake them sometimes as early as 5 a.m. so they can look for signs that a turtle made a nest or that a nest has hatched. Walking the beach with the soft light of the sunrise reflecting off the waves, it's easy to see the distinct marks in the sand, a sea turtle's calling card.

Pulling themselves to the dunes with their flippers, sea turtles lay their eggs at night, leaving a trail to and from the nest. For SCUTE volunteers, seeing a “crawl” never loses its excitement, and it also signifies a time to go to work.

Carefully, volunteers probe for the nest, usually from a loggerhead or green sea turtle, and determine whether it should be relocated to protect the eggs from potential predators or other hazards. At a crawl in Litchfield Beach in August, one particular nest needed to be relocated farther up the dunes.



Left: A loggerhead sea turtle egg is about the size and shape of a Ping Pong ball and takes an average of 60 days to hatch.

Opposite page: The soft light from the sunrise highlights the telltale signs of a turtle crawl, showing where a female sea turtle made her way up to the dunes to lay her nest before returning to the ocean.

“There’s approximately a 60-day incubation period for sea turtle eggs,” says Goffinet McLaren, who has been a SCUTE volunteer on the South Strand for five years. Pointing to a relocated nest, she says, “This nest will not hatch until October, and the reason we relocated the nest is because the original nest would be below the tide line, which could wash it out.”

Donning blue rubber gloves, McLaren gently pulls eggs from the nest and puts them into a bucket for relocation. About 10 feet higher on the dune, McClary’s on hand to prepare a new hole for the nest’s 83 eggs while McLaren puts an egg aside so it can be DNA tested.



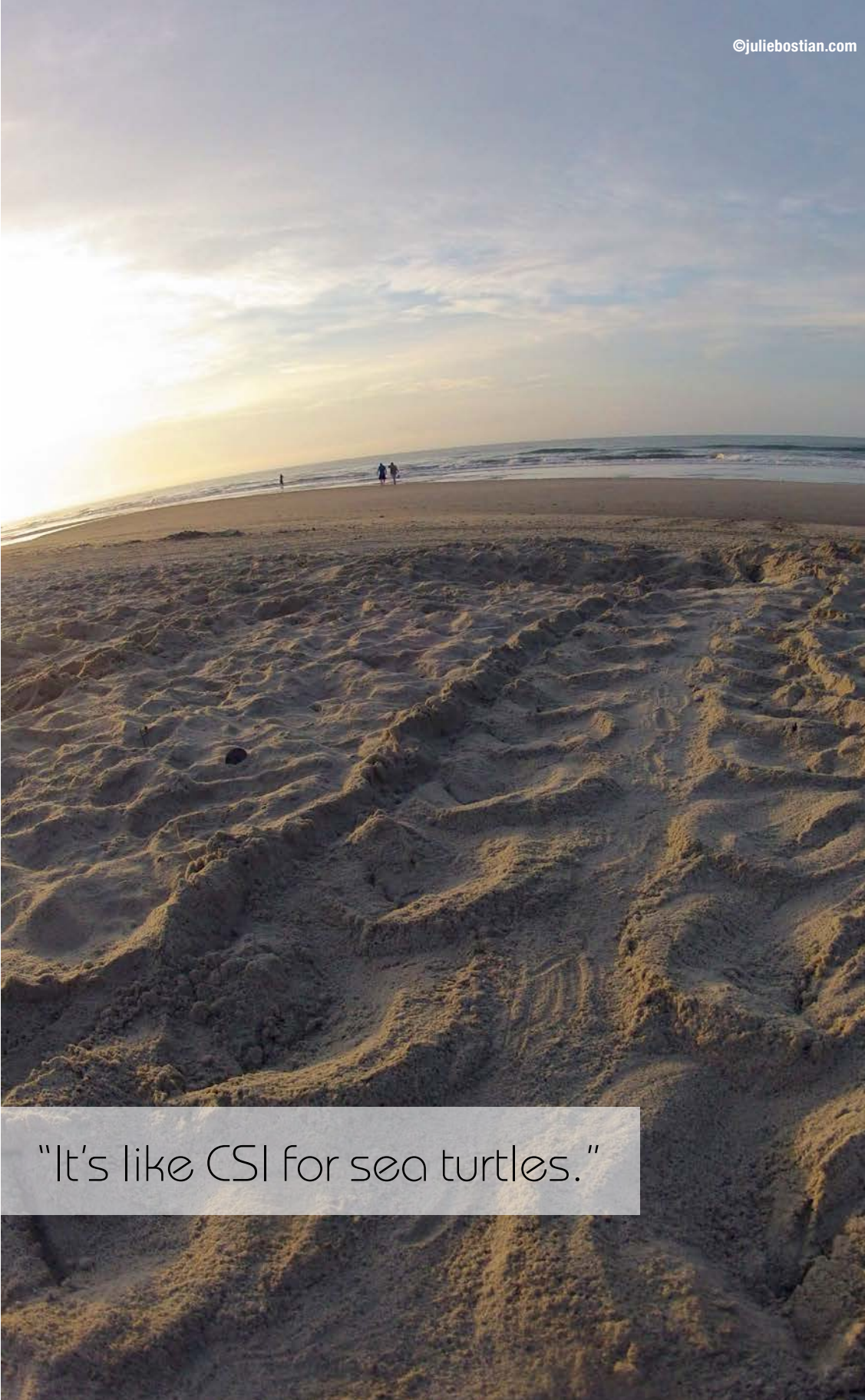
“We take one egg from every nest for testing. We break it and get rid of the yolk, because it has male DNA in it and we only need the female turtle’s DNA, which can be found in the shell of the egg,” McLaren explains. “The DNA is tested so we can follow where each turtle nests.”

“It’s like CSI for sea turtles,” says McClary.

After relocating the eggs, volunteers protect the nest by putting poles and netting around it and marking it with a sea turtle nesting sign. As they roam the beach each day, volunteers like McLaren will keep a close eye on this and other nests, like protective parents, and will count the days until the nest hatches and the tiny turtles emerge.

Seeing sea turtle hatchlings fighting their way to the Atlantic Ocean is an awe-inspiring experience, according to SCUTE volunteers.

“I’ve had my bucket list checked time and time again each time I see hatchlings emerge from a nest,” says Julie Bostian, a volunteer with SCUTE’s North Myrtle Beach Sea Turtle Patrol. “Often, more than 100 babies crawl their way out of the nests and march toward the ocean to begin their new life in the sea.”



"It's like CSI for sea turtles."

It's rare to see a nest hatch, especially since it usually takes place in the middle of the night. At inventories three days after the eggs have hatched, it's possible, however, to see one or two hatchlings still struggling to make their way out of the nest and to the water.

Visitors keep their hopes up that they'll be the lucky ones who get a glimpse of the tiny turtles. In Litchfield Beach, Gary Long was hoping he'd be the next person to see a hatchling. From Kentucky, Long and his family have vacationed for three years in the Litchfield area. He stumbled upon a crawl last year and has been hooked ever since.

"I'm hoping to see the little ones in person," Long says. "I'm hoping they'll let me kiss one before it goes into the ocean."

SEA TURTLES DIG THE DARK

As the turtles break free of their shells, their survival instincts kick in and they fight their way to the surface, pushing and crawling over each other. These little hatchlings innately know once they've made it out of the nest to follow the light of the moon as it reflects off the ocean.

With the development along the coast, however, those tiny turtles can be confused and distracted by artificial



light coming from hotels, homes, condominium buildings and even streetlights. As partners with SCUTE for more than 20 years, and as the power source for those electric lights, Santee Cooper has maintained a public service campaign to educate locals and visitors that artificial light on the beach can be disastrous for the hatchlings, sending them scurrying away from the ocean instead of toward it.

Santee Cooper and SCUTE's sea turtle campaign recently went through an overhaul. One new feature is our mascot Caretta, named after the loggerhead turtle's scientific name *Caretta caretta*. Visitors along the Grand Strand may see Caretta posing for bumper stickers, showing off her shell in brochures, wiggling her way into commercials and catching people's attention on signs as they walk up to the beach. Caretta has also befriended many rental agencies, and Santee Cooper is providing material on sea turtles so their guests learn the importance of turning out the lights at night.

In addition to creating educational materials, we're doing our part to keep loggerheads and other turtle species coming back year after year by shielding public street lights so hatchlings don't mistake them for moonlight.

"Seeing a hatchling is an affirmation of life," says Pat Milling, a Litchfield Beach SCUTE volunteer. "People don't realize turning the living room light on at night can affect whether or not the turtles make it to the ocean."

It's true: Sea turtles really do dig the dark. **PS**

Opposite page: Beachgoers watch as SCUTE volunteers perform an inventory on a Loggerhead sea turtle nest in Litchfield beach. Volunteers count the number of eggs that hatched and those that didn't mature. Volunteers also educate crowds that form at an inventory, giving them brochures and bumper stickers provided by Santee Cooper.





Winyah Generating Station near Georgetown

ENVIRONMENTAL ACCOUNTABILITY

Santee Cooper's Environmental Management System

When most of us hear the term “EMS,” ambulances, paramedics and emergency rooms come to mind — not how an electric and water utility can improve the effect it has on the environment.

By Willard Strong

Photography by Jim Huff

At Santee Cooper, EMS stands for Environmental Management System. It's a six-year-old program that has fundamentally changed the way we approach, execute and apply accountability for protecting the environment.

As examples, EMS is applied when there is a change in emissions-monitoring equipment at generating stations or there is new construction at a substation site. If there is a change to a chemical process, such as adding a caustic chemical at a cooling tower or to a water-treatment process at the regional water systems, the EMS is also in play.

"I think many people see the benefits of this program," says Brian Holmes, who has overseen EMS since 2006. "This includes increased environmental awareness, detailed risk



Brian Holmes (right) is director of the Santee Cooper Environmental Management System and is assisted by (from left) Environmental Specialist Will Brown and General Engineer Lauren Browne.

assessments and pre-project environmental reviews, and improved communications within and between departments."

Its development team included representatives from our environmental management, generation, transmission, distribution, property management, auditing and legal departments.

Initially, EMS was rolled out at the Cross, Winyah, Jefferies and Grainger generating stations in the fall of 2006. These coal-fired facilities represent 4,032 megawatts, the capability to light up approximately 2 million average-sized homes in the Palmetto State. These power plants form the bedrock of what makes us the state's largest power producer.

Burning coal has inherent environmental challenges — from the time it is delivered by rail to the time it enters the boiler that makes steam to turn a turbine. Since first converting coal to kilowatts at Jefferies Station in 1954 (Santee Cooper was an "all hydroelectric" utility from 1942 until 1954) we have taken this task seriously, even before there was an Environmental Protection Agency.

SINCE ITS INCEPTION, EMS HAS BEEN COMPRISED OF POLICIES AND PROCEDURES THAT:

BETTER MANAGE TODAY'S COMPLEX WEB OF ENVIRONMENTAL REQUIREMENTS

SERVE AS A DAILY REMINDER FOR EMPLOYEES TO CONSIDER THE ENVIRONMENTAL CONSEQUENCES OF THEIR ACTIONS

To implement EMS, a comprehensive manual was created and extensive training was conducted over several months at the generating stations.

At the time of its implementation, Jay Hudson, Santee Cooper's manager of environmental management said, "The EMS will build upon Santee Cooper's strong environmental record by helping us improve environmental compliance and performance. It will also assist us with integrating environmental compliance into business operations and planning decisions."

Routine audits are conducted to measure compliance and validate EMS credibility.

In 2007, the year after EMS began, a comprehensive independent audit was conducted by ICF International Inc., a multinational management, technology and policy consulting firm based in Fairfax, Va.

Change can be hard for large organizations and Santee Cooper has a workforce of approximately 1,800 employees. But Holmes says when the audit was conducted, generating station personnel were singled out as being extremely cooperative.

Says Holmes, "The station personnel did a really good job. And I do think ICF was very impressed in comparing us to what other utilities are doing. These areas include fly ash recycling, using methane gas at landfills

“ The EMS will build upon Santee Cooper's strong environmental record by helping us improve compliance and performance. ”



to generate Green Power and the Give Oil for Energy Recovery, or GOFER, program whereby we collect used motor oil and safely convert it into electric power.

“As with anything like this, there are areas to improve on, but I thought we made a tremendous start on EMS six years ago.”

Hudson was also pleased with the program’s inaugural audit, noting that ICF concluded that we had substantially met the requirements to develop and implement the program.

“This was a good beginning and it was something for us to build on for our future EMS development,” Hudson says.

The report also pointed out that “Santee Cooper has an active community education and involvement program underway in both electronic and print media,” and that “efforts are made to solicit input and comment from the public.”

In 2009, EMS expanded to the entire generation department.

“One of the things EMS is good at,” Holmes says, “is that it improves communication

The Berkeley Landfill Gas Generating Station south of Moncks Corner is rated at 3 MWs and is one of six facilities owned and operated by Santee Cooper that generate power from landfill gas, a renewable resource.

on environmental issues within generation and outside generation, up to and including executive management. It also improves our focus on issues among employees so that they're thinking about the environmental impact of their actions."

Says Holmes, "Environmental management sits down with the management team at each generating station quarterly to discuss all things EMS related. These regular meetings include folks from generation technical services, environmental services and air quality."

In addition to periodic audits by a firm such as ICF, we conduct annual internal audits that concentrate on the areas of air, water and waste, and cover all of generation's environmental programs every four years.

"This approach is effective because it raises everyone's awareness about environmental issues," Holmes says, "because we all know we'll be checked on, and we know the audit report goes to executive management, which is keenly involved in the EMS process."

This truck is hauling gypsum from Cross Generating Station to a facility where it can be used to manufacture wallboard. Gypsum is created by tweaking the coal-combustion process at the plant, located in northwestern Berkeley County.



The assessment phase of the Environmental Management Information System or EMIS software project also kicked off in 2009. EMIS represents a \$2.4 million commitment “to enhance compliance and efficiency,” Holmes says.

THE FUTURE OF EMS

This past spring, EMS expanded to include our power delivery, retail operations, property management, construction and transportation services. What has also expanded, Holmes noted, is the burgeoning burden of regulations imposed on utilities.

“Requirements have grown significantly since the early and mid-1990s,” he says. “There are literally thousands and thousands of pages of environmental regulations.”

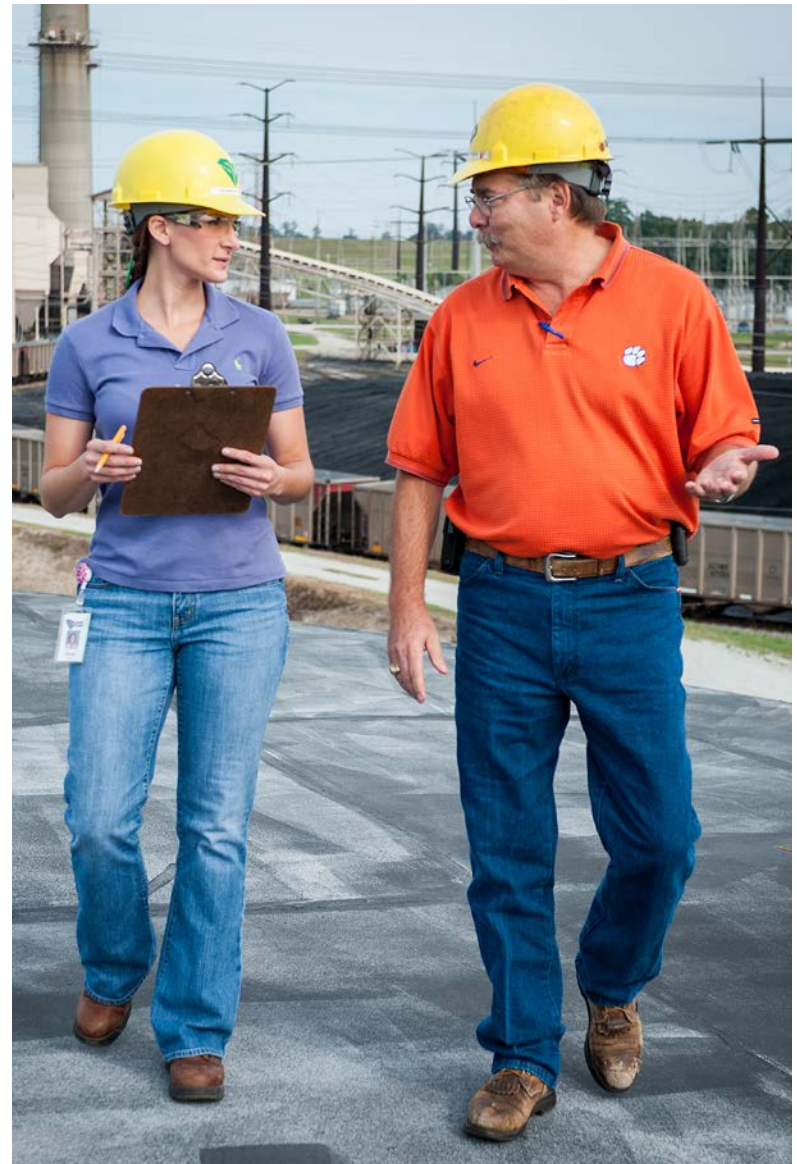
As the digital age continues to mature, Holmes says “we’re distilling manuals down to software to meet these requirements, and we’re going from spreadsheets to a central database. That’s one reason why there are hundreds of people involved with EMS at Santee Cooper, from committees to the very top.”

At Santee Cooper, acting responsibly is what we’ve always tried to do in more than three-quarters of a century of service to the people of South Carolina. **PS**



Santee Cooper’s Give Oil for Energy Recovery, or GOFER, program collects used motor oil at sites throughout South Carolina with trucks like this one. Santee Cooper is the state’s largest recycler of used motor oil, which is safely converted into electric power.

Below: Ginny Cox, auditor II (left) and Jody Perry, superintendent of operations at Jefferies Generating Station review an environmental agenda at the Moncks Corner-area plant.





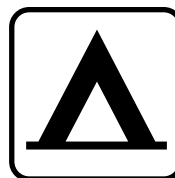


A Trail Runs Through It


The Swamp Fox 50 Mile Paddle/Camp Trail

By Kevin F. Langston
Photography by Jim Huff

The Santee Cooper Lakes span more than 450 miles of shoreline and occupy more than 160,000 acres in Berkeley, Calhoun, Clarendon, Orangeburg and Sumter counties. They were the result of the Santee Cooper Hydroelectric and Navigation Project, which sought to electrify rural South Carolina by connecting the Santee and Cooper rivers through two man-made reservoirs.





 When construction began in 1939, it was the largest land-clearing project in United States history as well the largest public works project in the nation. By the time we produced our first electricity in February 1942, the project had created South Carolina's largest lake in Lake Marion; its sibling, Lake Moultrie, is the Palmetto State's third largest.

In the decades following their impoundment, the Santee Cooper Lakes have become one of the region's most cherished natural resources and a popular recreational destination. The lakes system provides 15,000 acres of federally managed land and water at the Santee National Wildlife Refuge, and an additional 18,250 acres are managed as Wildlife Management Areas by the South Carolina Department of Natural Resources.

"People are very passionate about these lakes, and they always have been," says Susan Welch, supervisor of inspection and

compliance with Santee Cooper's property management department. "To the people who don't get their electric bill from us directly, the name 'Santee Cooper' is synonymous with these lakes."

Recreational opportunities on the Santee Cooper Lakes abound, and in recent months a handful of state and local agencies have collaborated on something new.

The Swamp Fox 50 Mile Paddle/Camp Trail winds through lakes Marion and Moultrie and highlights their historical and natural significance while also utilizing the dozens of islands and primitive campsites throughout. The trail represents a collaborative effort involving Santee Cooper, the South Carolina Department of Natural Resources (SCDNR), the Berkeley County Soil and Water Conservation District, and the Boy Scouts of America.



Above: (Left to right) Archie Thompson, Susan Welch and Stan Stanley gather at Camp Moultrie to discuss the route of the Swamp Fox 50 Mile Paddle/Camp Trail.

Left: The Santee Cooper Lakes feature dozens of islands with primitive campsites. They are called "primitive" because they lack amenities like electricity and running water.

Below: One of the goals for the Swamp Fox 50 Mile Paddle/Camp Trail is for Boy Scout troops to adopt some of the islands and remove any litter.



Located on Lake Moultrie just north of Santee Cooper headquarters in Moncks Corner is the Boy Scouts' Camp Moultrie. Stan Stanley has been its camp ranger for more than 10 years.

"I know Santee Cooper has been involved with Camp Moultrie since before I came here, and we've always had a terrific relationship," Stanley says.

About eight months ago, Stanley and Archie Thompson began discussing the idea of plotting a 50-mile paddle trail through the lakes. Thompson volunteers with the Boy Scouts and is also an associate commissioner with the Berkeley County Soil and Water Conservation District, which worked previously with Santee Cooper and SCDNR on the development of the Berkeley County Blueways trail program that identifies more than 175 miles of paddling trails in the county.

"Stan and I bounced the idea back and forth over several months before I brought it to the Berkeley County Soil and Water Conservation District," Thompson says. "Once they were on board, I went to Santee Cooper, and it's carried on from there."

The origin of the Swamp Fox 50 Mile Paddle/Camp Trail actually dates back to the Swamp Fox National Recreational Trail, which was developed in 1968. Named for Brig. Gen. Francis Marion, the trail took advantage of a 300-mile network of railbeds constructed by logging companies before the U.S. Forest Service purchased the property and in 1936 designated the 258,864 acres as the Francis Marion National Forest.

Much of the Swamp Fox National Recreational Trail was eventually incorporated into the Swamp Fox Passage of the Palmetto Trail, a project conceived in 1994 to establish a network of more than 420 miles of hiking and



Much of the Swamp Fox 50 Mile Paddle/Camp Trail sticks close to the lakes' scenic shorelines.

cycling trails connecting the mountains of the Upstate with the sea in the Lowcountry. The Swamp Fox Passage is approximately 47 miles long, representing the longest portion of the Palmetto Trail. It begins just north of Moncks Corner and ends in Awendaw.

“The Palmetto Trail was designed for hiking and cycling, and so Archie and I had the idea to parallel it with an aquatic trail that’s as close as possible to the Palmetto Trail,” Stanley says. “Our goal is to get it all the way up into the Blue Ridge Mountains.”

Once Santee Cooper agreed to support the Swamp Fox 50 Mile Paddle/Camp Trail, Welch reached out to her contacts at SCDNR.

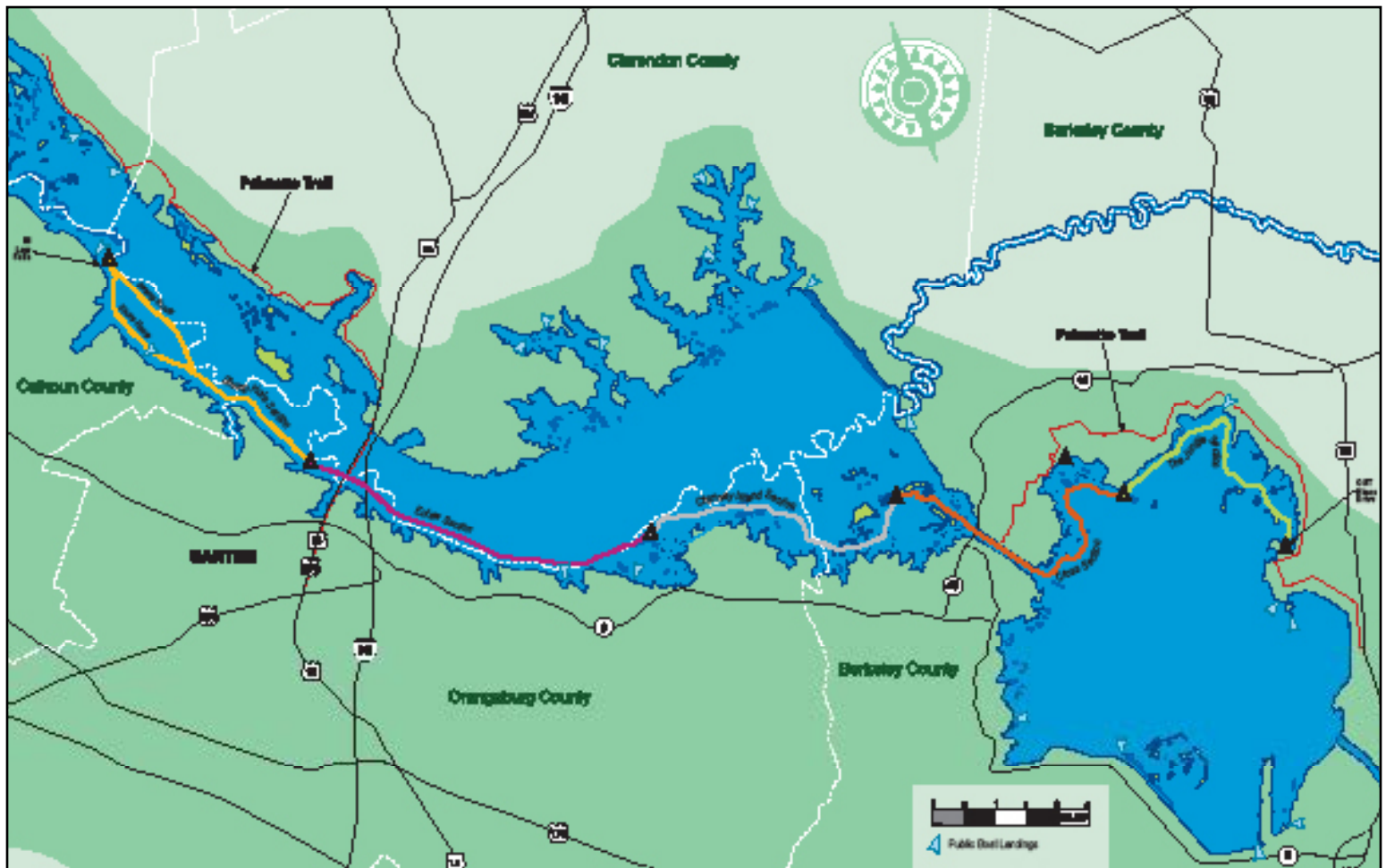
“There’s hardly a week that goes by when we aren’t working with SCDNR on something,” she says. “If the lakes were children, Santee Cooper and SCDNR would be the mother and father.”

“Santee Cooper and SCDNR have always worked well together,” says Sgt. Thomas Spann, SCDNR Law Enforcement for Region IV.

Spann says one of SCDNR’s requests was for the GPS coordinates of the islands along the trail to be recorded. “This will help SCDNR respond quickly to any emergency,” he says.

The Swamp Fox 50 Mile Paddle/Camp Trail can be used by paddling enthusiasts of all stripes, but it was actually designed with a Boy Scout patch in mind.

“The troop must complete the 50 miles over five consecutive days and put in 10 hours of community service along the way,” Stanley says. “We wanted to give the scouts stewardship over the primitive campsites along the trail.”



The Swamp Fox 50 Mile Paddle/Camp Trail is divided into five sections between Cameron in Calhoun County and Bonneau in Berkeley County.

[GPS Coordinates]



Low Falls
33°37'56.5"N
80°32'37.0"W



Station 1
33°30'47.2"N
80°28'29.5"W



Station 2
33°25'54.6"N
80°18'43.3"W



Station 3
33°24'51.0"N
80°10'32.5"W



Station 4
33°22'53.9"N
80°03'37.3"W



Hines Drive
33°19'56.4"N
79°58'57.2"W



Alternate
33°23'55.0"N
80°04'47.8"W

www.swampfox50paddlecamptrail.com

Thompson compared it to the Adopt-a-Highway program. “Our goal is for the scouts to eventually adopt these campsites.” He says one troop has already adopted Coon Island on Lake Moultrie.

“These campsites have been here for a long time, and it’s nice that they can be used for something positive,” Welch says. “We’re happy that people enjoy using these campsites, but they don’t always take care of them. It’d be great if this trail could help raise awareness and encourage people to take better care of these campsites.”

Beyond its natural offerings, Thompson says the trail also features some significant historical landmarks. Eutaw Springs in Orangeburg County was the location of the last major engagement of the American Revolutionary War in the Carolinas and is considered one of its bloodiest.

“There’s also the lumber mill at Ferguson, the cemetery on Church Island, the Santee Indian Mound and Fort Watson site, and, of course, the Old Santee Canal,” Thompson says. “We could probably come up with a scout patch just from the historical sites along the trail. Scouts live for that stuff.”

No scout troop has attempted the trail so far, but Stanley says the first troop is scheduled to have a go over the Christmas holiday. Before the first scout can even launch his canoe, he will have had basic swimming and be familiar with boating safety.

“We want them to enjoy the experience, but they need to take this trail seriously. They need to be safe,” Welch says.

Thompson says the average paddler can go about two miles an hour under ideal conditions. “So you’re looking at an average of five hours each day of just paddling. Then there are the two hours of community service that are required.”



Above: Land agents Victor Williams and Dehn Ganey study a map of the Santee Cooper lakes as they survey campsites along the Swamp Fox 50 Mile Paddle/Camp Trail.

Right: An old lumber mill near Eutawville is among the historical sites located along the Swamp Fox 50 Mile Paddle/Camp Trail.

Below: Located within the Santee National Wildlife Refuge near Summerton, the Santee Indian Mound and Fort Watson site offer opportunities for paddlers to explore the area’s history that reaches over 1,000 years in the past and includes a 1781 American Revolution battle.





First Sgt. Angus MacBride, SCDNR Law Enforcement for Region IV, says SCDNR and Santee Cooper have had several meetings involving all aspects of lake usage, and safety is something they discuss every time.

“Any boater, no matter the size of the vessel, must follow SCDNR safety guidelines,” MacBride says. “They have to have a wearable lifejacket for everyone on board. They have to have a sound-producing device, like a whistle. And, if they’re caught on the water after dark, they have to have an all-around white light.”

Thompson says scouts are required to wear a lifejacket. “The majority of the trail is along the shore, so they won’t be in open water,” he says.

In the event of an emergency, MacBride says the best way to reach SCDNR is through 911. “Berkeley County knows to automatically contact SCDNR immediately if there is a situation on the water,”

he says. “We encourage people to use the Operation Game Thief number, which is 1-800-922-5431, but in cases of emergencies, 911 will get you to a game warden.”

From conception to fruition, the Swamp Fox Paddle Trail has taken a little more than eight months.

“I think that speaks to the relationships we have with each other,” Welch says. “Whether it’s through our daily management of the lakes or through community outreach, we have a lot of positive interaction with each other. This paddle trail has been no different.”

MacBride says when the outcome of a project like the Swamp Fox 50 Mile Paddle/Camp Trail is the benefit of a child, you see organizations want to pull in the same direction.

“These kids are a first priority,” Stanley says, “and this trail will give them an incredible experience.” **PS**

Reduce The Use lights the way toward energy savings

By Mollie Gore

Brookgreen Gardens, a popular sculpture garden in Murrells Inlet, is saving \$6,000 a year on electricity costs all because of a simple decision to install more efficient lighting. And that's on top of the one-time, \$4,889.75 rebate it received from Santee Cooper towards the purchase of the light fixtures.

That's one case study from three years of energy-efficiency enabling by our Reduce The Use team, which works day in and day out to help make energy-efficiency improvements that are so far saving 55.1 million kilowatt-hours a year.

That's enough energy saved to power about 3,800 households, assuming an average monthly electricity demand of 1,200 kWhs per household.

Lighting continues play a big role in saving customers energy and money, thanks to programs that helped commercial customers swap out their commercial-grade lighting for high-efficiency models.

“We’ve had a really big push for lighting projects this year,” says John Holladay, a financial analyst involved in program development for RTU. “Federal government mandates mean that manufacturers will not be able to produce T12 lighting after this year, and that has helped our business customers make the decision to go ahead and switch to T8s, which of course ultimately save them money in energy use anyway.”

The manufacturing shut-down is the stick for abandoning the T12s, and we are dangling a very sweet carrot: rebates that cover up to 75 percent of the cost of the project, for a limited time for eligible customers. “The Direct Install program is designed for small businesses and nonprofits,” Holladay says, noting that response has been strong.

And although lazy rivers are a target of the Custom Program, sales of variable frequency drives that help temper their energy use have been anything but lazy. The same devices, which control pump motors, can also help cut energy use for high-rise hotels and condo buildings that need to pump water to upper floors. “We’re actually 80 percent above our goal in the Business Custom program this year, thanks in part to the popularity of these drives,” says Patrick Howle, who supervises our team of commercial energy advisors.

Like Howle on the commercial side, Herman Holmes and his staff of advisors work one-on-one with homeowners looking to make energy-efficient upgrades. Armed with another battery of rebates, the residential advisors can counsel homeowners on everything from new heating and air conditioning units to refrigerators. And if the rebates aren’t incentive enough,

residential customers can also apply for low-interest Smart Energy loans that they can pay back through their monthly electric bill.

“We’ve helped with over 900 projects so far this year, and 850 of those are with existing homes,” Holmes says. “Probably half of those have been driven by the low-interest loan program. At 1.25 percent, that’s a very attractive option for homeowners, and it helps them to afford some of the more efficient, high-energy systems that are out there.” The most popular RTU residential program this year has been one offering rebates for high-efficiency HVAC systems.

Holmes also credited our Trade Allies for helping let customers know about Reduce The Use rebate options. We maintain a list of these Trade Ally contractors on our website. **PS**

MORE INFORMATION

website: www.reducetheuse.com

Horry/Georgetown counties:
843-347-3399 x3910

Berkeley county:
843-761-8000 x3910





THE

WEEDING OUT WEEDS

Invasive
weeds are
not new
to Lake
Moultrie
or Lake
Marion.
But
they are
pervasive.

By Mollie Gore
Photography
by Jim Huff

hey say bad luck comes in threes, and that is the case on the Santee Cooper Lakes this year. A trio of invasive weeds, including one still so new that the state hasn't officially declared it such, has literally taken root and continues to hold on despite the best efforts of Santee Cooper's analytical and biological sciences department.



This year is the 30th anniversary of hydrilla first being spotted in the system, in Lake Marion near Rimini. By 1994 it covered almost 45,000 acres of the two lakes — roughly 30 percent of the water surface. Aggressive, hydrilla-eating Chinese grass

carp were introduced to the lakes in 1989 and finally made a dent in the problem in the mid-1990s. Maintenance stocking of the sterile carp became more routine in the 21st century, but a combination of events has led to a resurgence in hydrilla the



Sterile Chinese grass carp are stocked annually in the Santee Cooper Lakes because they have been found to be effective in battling the spread of hydrilla, shown at left.

Opposite page: Santee Cooper uses EPA-approved herbicides in battling aquatic weeds. Spraying is done on foot, by truck and helicopter, as shown here.





The water hyacinth has a purple bloom and, as shown here, can grow on top of other plants and weeds. The lighter patches are actually crested floating heart, and the challenge in fighting these is to get rid of the hyacinth first, so treatment can reach the quickly reproducing crested floating heart.

past couple of years. Today, it covers about 5,000 acres, a far cry from its peak but still alarming growth from a few hundred acres just three years ago.

A second nuisance plant is the deceptively delightful-sounding water hyacinth, which first emerged in the early 1990s and is currently blanketing about 1,500 acres. That's a larger presence than in recent years, due to the mild winter. "It's been around awhile, but it's easy to control," says Larry McCord, supervisor of analytical and biological sciences. In other words, it's out there and it's the least of his worries.

McCord knows he'll eventually stamp down the hydrilla again too. He's battling a shortage of carp in the marketplace right

now, but as he finishes out his plan to stock 109,000 of the fish in the lakes this year, they'll go to work on the hydrilla.

It's the third plant, the not-yet-designated invasive weed, that continues to thwart his team's best efforts at eradication: crested floating heart. If the water hyacinth sounds nice, the crested floating heart looks nice. Think Monet's Water Lilies, but easier to duplicate since it spreads so easily.

In fact, the plant's comely appearance is likely how it first found its way to the lakes, McCord figures. Probably a well-meaning resident thought it looked pretty in a container garden or somewhere else, pulled one up and transplanted it. The leaves can develop their own root structure though, and it can spread

just by a leaf breaking loose and drifting or being pulled on a boat propeller somewhere else.

McCord says the latest survey shows the crested floating heart is covering about 3,000 acres of the lake now, up 50 percent in three years. It could easily spread to be as big a problem as hydrilla was two decades ago.

Scientists haven't found a fish yet that can eat enough of the weed to control it. So McCord uses chemicals, which have limited effectiveness. Getting the plant declared invasive by the state might help secure additional resources to battle it and keep folks who think it's pretty from moving it to their backyard lakeshore. McCord has been working on getting that declaration since 2005.

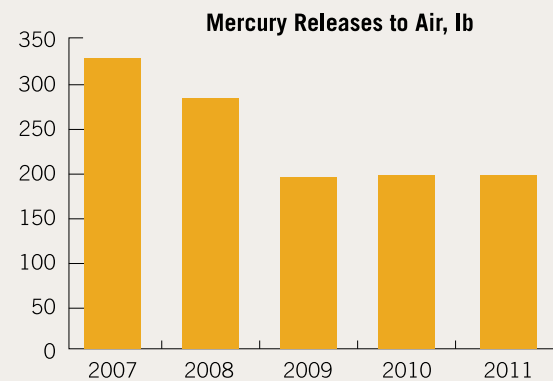
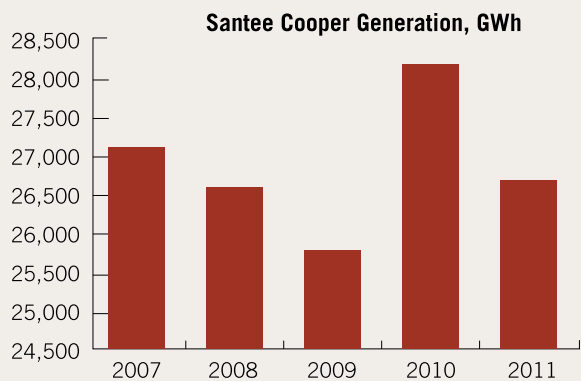
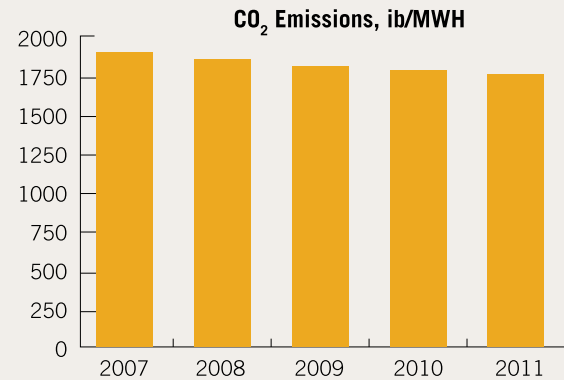
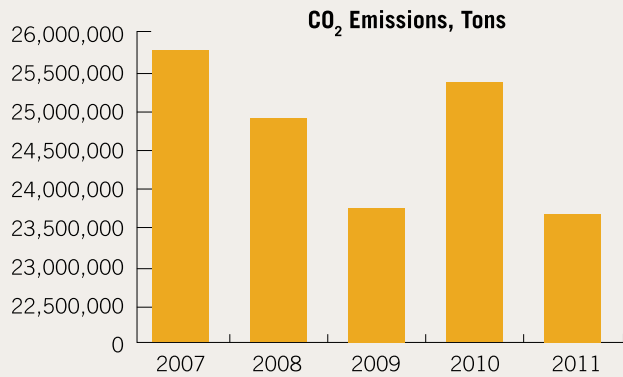
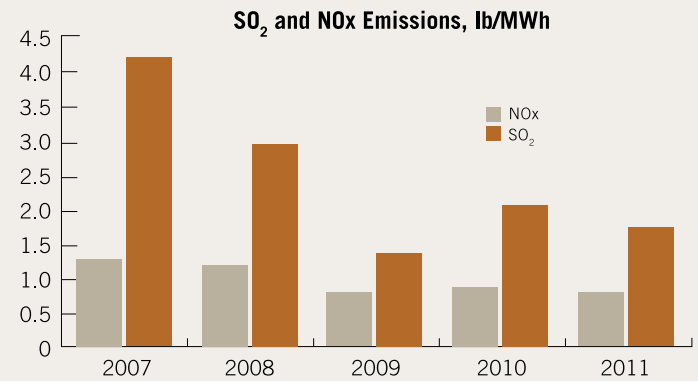
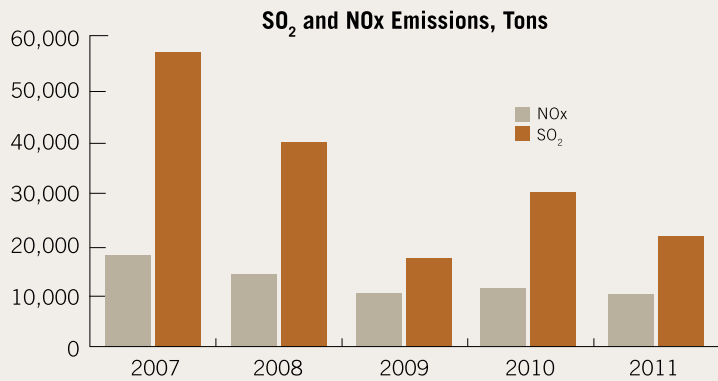
There's real money involved in the fight, too. Santee Cooper is spending \$1.2 million this year battling invasive weeds on the lakes, part of our overall responsibility for managing the lake system to promote native habitats, recreation and inland navigation. McCord's team tackles the weeds with truck, airboat and helicopter applications of EPA-approved chemicals, and he's cornered the market on grass carp now in the ongoing hydrilla war. At best, that's enough money to hopefully keep the problem from getting bigger, although the crested floating heart is gaining acreage right now.

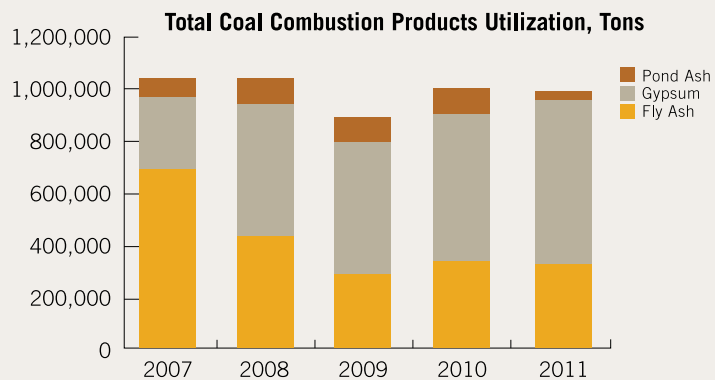
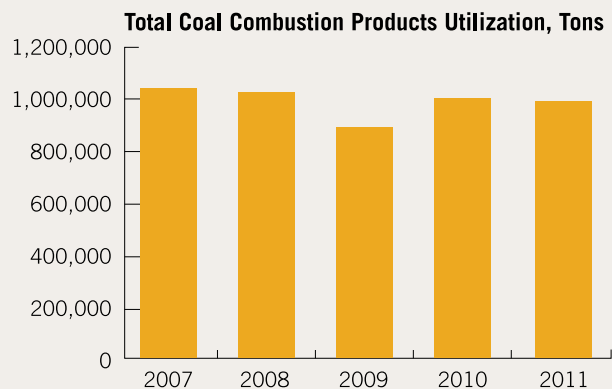
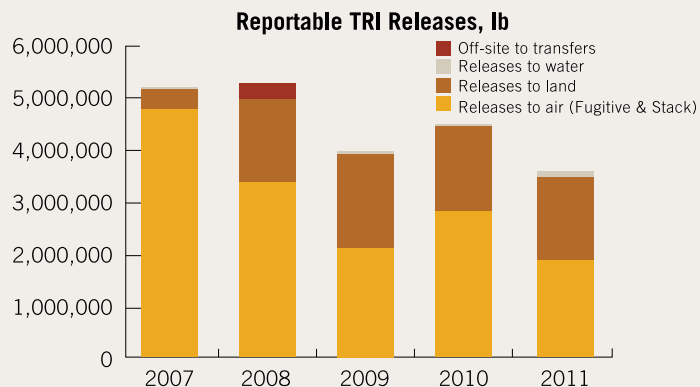
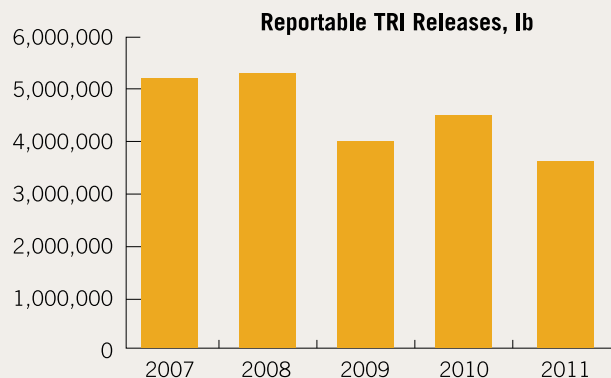
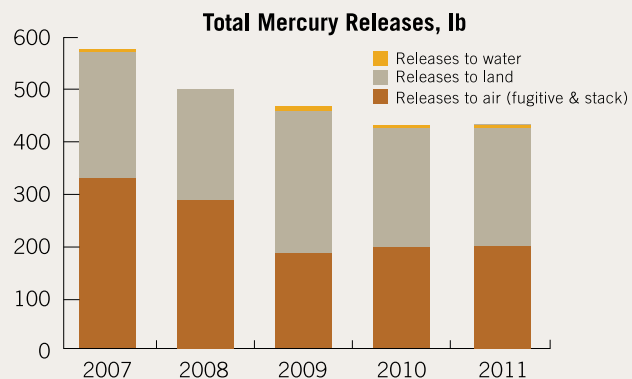
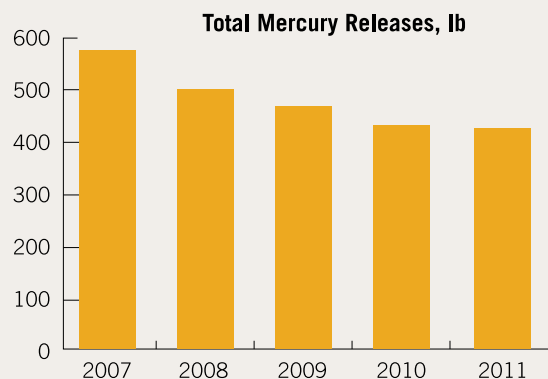
"I hope people out there will notify us if they see new areas of the weed," McCord says. "I hope they'll try not to spread it, and I hope they'll be patient as we work to get rid of it." **PS**

Although pretty when in bloom, the crested floating heart has proven an aggressive plant.



2011 Environmental Performance





RATE ADJUSTMENT APPROVED

The Santee Cooper Board of Directors on Sept. 12 authorized a rate adjustment that will increase electric rates for customers an average 3.5 percent each year for two years.

The first adjustment will take effect Dec. 1, 2012, and the second on Dec. 1, 2013. The adjustments will help Santee Cooper meet increased costs associated with new generation, primarily the ongoing V.C. Summer Nuclear Station expansion, and to comply with new environmental regulations.

Santee Cooper has not increased base electric rates since November 2009.

“In considering this rate adjustment, the board reviewed an independent rate analysis, management’s proposal, and the comments and input we received from the public,” said Santee Cooper Chairman O.L. Thompson. “I know that times remain tough for many of our customers. The fact is, Santee Cooper has already cut or deferred \$1.8 billion in capital expenses and approved other cost-saving measures the past two years. We are now at a point where we must increase revenues to ensure we can fulfill our statutory requirements to recover our costs, meet new environmental regulations and build generation that is important to South Carolina’s future.”

The rate adjustment affects residential, commercial, industrial, municipal and lighting customers. More information can be found at www.santeecooper.com/rates.

GET PLUGGED IN

Beginning Nov. 1, Santee Cooper will be providing customers with additional information on their bills about the resources we spend on environmental compliance.

Santee Cooper has invested \$1.3 billion since the 1970s in meeting environmental regulations, equipping our generating stations with the latest equipment to control emissions and minimize waste. Our newest generating unit, Cross Unit 4, cost \$640 million to build; \$218 million of that was for environmental compliance.

The annual budget to maintain compliance is significant as well: We estimate compliance costs to be \$227 million in 2013 alone.

The bottom line for customers: A full 11 percent of their monthly bill payment is to cover environmental compliance costs. And new EPA regulations figure to significantly increase costs.

Santee Cooper has an excellent record of environmental stewardship, and we look for ways to minimize costs of these required upgrades and installations. We also actively participate in opportunities to influence the debate when costly proposals are considered to make sure policymakers understand the impact of their actions on customers.

To learn more, visit www.santeecooper.com/energymatters.

GREENBACKS FOR GREEN POWER

For 11 years, Santee Cooper has been tapping landfills throughout South Carolina for clean, renewable energy. By burning the methane gas that is produced naturally as garbage decomposes, our six landfill-generating stations are preventing a harmful greenhouse gas from escaping into the atmosphere while also generating a reliable source of clean electricity.

The 28 megawatts these landfills are capable of producing form the cornerstone of our first-in-the-state Green Power generation program. Over the years, that program has expanded to include the first solar-power station and first wind turbine to be connected with the South Carolina grid. The 311-kilowatt Grand Strand Solar Station is one of South Carolina's largest solar installations and the flagship for additional solar installations at 20 schools across the state, Coastal Carolina University, the Center for Hydrogen Research, and the Technical College of the Lowcountry.

We've been involved with offshore wind feasibility studies, helping to lay the crucial groundwork for future development.

Our Green Power generation program is a byproduct of creative ingenuity, but none of it would be possible without the support from customers. Because renewable energy is typically more expensive than traditional electricity, Santee Cooper offers Green Power for sale at a premium on a voluntary basis to further grow our renewable-energy program without burdening customers.

Through August of 2012, customers have purchased over 16,000 MWhs of Green Power. That's important, because all revenues from the voluntary sale of Green Power are fully reinvested into the future development of additional renewable resources and Green Power facilities.

Residential customers can purchase Green Power in blocks of 100 kWhs for \$3 each. Commercial customers can purchase blocks of 200 kWhs for \$6 each, and industrial customers can buy 1,000 kWhs for \$30 each. Organizations of all sizes can power their events with Green Power. Even customers of other utilities can buy Green Power tags to support the program. **PS**



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